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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,825	03/08/2004	Morteza Cyrus Afghahi	13435US04	2778
23446 7590 12/31/2009 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER WELLS, KENNETH B	
			ART UNIT 2816	PAPER NUMBER
			MAIL DATE 12/31/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/795,825

**Applicant(s)**

AFGHAHI ET AL.

**Examiner**

Kenneth B. Wells

**Art Unit**

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Introduction***

1. Applicant's response filed on 12/9/09 has been received and entered in the case. In view of the arguments included therein, the previous rejection based on Pilo et al is now withdrawn. However, a new prior rejection is necessitated in view of newly discovered prior art. Any inconvenience caused by the delay in citing this new prior art is regretted.

### ***Specification***

2. The disclosure is objected to because of the following informalities: on page 34, line 3 of the specification, it appears that "1010, 1011" is incorrect because these two reference numerals refer to the same node in instant Fig. 10 and, moreover, such node does not represent the inputs of differential amplifier 1012. Also in the specification, on page 34, line 8, it appears that "1002" should be changed to --1021--  
Appropriate correction is required.

***Claim Objections***

3. Claim 9 is objected to because of the following informalities: on line 7 of claim 9, it appears that the word "an" should be changed to --the-- because "an input signal" has already been set forth on the first line of claim 9 (note that this objection was pointed out in paragraph 3 of the previous office action). Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kerth, U.S. Patent No. 5,477,481.

As to claim 9, note Fig. 4A of Kerth, where the step of "sampling a voltage present at an input node" reads on the operation when the voltage at the top input terminal (where VINP is received) is transferred to the left plate of the top

capacitor C1, i.e., when the top switch phiA closes; the step of "holding the sampled voltage at a reference node" reads on the storage of charge on the top capacitor C1 in response to the top switch phiA and the other phiA switch connected to the right plate of C1 closing; the recited step of "measuring an input signal at the input node by sampling the input signal and comparing it to the reference voltage" reads on the operation when the phiA switches open and the phiB switches close (note that this operation occurs at a predetermined interval after the sampling and holding of the voltage by switches phiA, and note that the input signal VINP gets compared to the reference voltage via comparator 48).

As to claim 10, the recited step of "activating a sampling circuit a predetermined interval before measurement of the input signal is initiated" reads on the closing of the phiA switches.

***Action is Non-Final***

5. In view of the above-noted new grounds of rejection not necessitated by amendments to the claims, this action is non-final.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B. Wells whose telephone number is (571)272-1757. The examiner can normally be reached on Monday through Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan, can be reached at (571)272-1988. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kenneth B. Wells/  
Primary Examiner  
Art Unit 2816

December 29, 2009